

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-15, 17-18 and 20 are pending in this application. Claims 1, 3 and 6-15 are amended, support for which is found in the original claims. Claims 16 and 19 are cancelled without prejudice or disclaimer. No new matter is added.

In the outstanding Office Action, Claims 1-9 and 11-20 were rejected under 35 U.S.C. §102(b) as anticipated by U.S. 2002/0149651 (Fukumoto); and Claim 10 was rejected under 35 U.S.C. §103(a) as unpatentable over Fukumoto in view of U.S. 2004/0021645 (Kobayashi).

Claim 1 recites:

An input apparatus for performing an input operation on a front surface of a panel, comprising:

input detection means for detecting an input operation performed on the front surface of the panel, and for ***determining whether the input operation is a pressing operation or a touching operation by determining whether a signal from the panel becomes stable for at least a predetermined period of time***, the signal from the panel being generated based on the input operation;

waveform generation means for ***generating a first signal waveform having a first amplitude while the input detection means detects that the input operation is being performed, and generating a second signal waveform having a second amplitude which is larger than the first amplitude based on a determination by the input detection means that the signal from the panel has become stable for at least the predetermined period of time, thus indicating the input operation is the pressing operation***; and

panel deforming means for deforming the panel based on the signal waveforms generated by the waveform generation means.

[Emphasis added].

As recited above in Claim 1, the input apparatus detects an input operation on a front surface of a panel, determines whether the input operation is a pressing operation based on whether a signal from the panel becomes stable for at least a predetermined period of time. Upon detection of the input operation, the panel is deformed according to a first generated

signal waveform, which has a first amplitude. Upon determination that the input operation is the pressing operation, the panel is deformed according to a second generated signal waveform, which has a second amplitude greater than the first amplitude. Thus, the panel is deformed a greater amount as a result of the pressing operation and provides an indication to a user that the pressing operation has been performed. It is respectfully submitted the above-noted features of Claim 1 are neither disclosed nor suggested by the cited references.

In particular, Fukumoto describes detecting a touched position on the touch panel, and detecting an operation input (such as a pressing operation or a touch button) on the touch panel. The touch panel outputs a signal showing a touched position on the touch panel, but this signal does not result in a vibration of the touch panel absent the presence of a touch button (discussed below). Based upon a pressing operation, waveform data of the drive signal to be applied to an oscillatory actuator is read from a memory to vibrate the touch panel or an operation key. In summary, according to Fukumoto, when a “touch operation” is detected, “a signal showing a touched position on the touch panel” is output. Vibration of the touch panel is performed upon detection of an operation input (such as a pressing operation or a touch button) from the touch panel.<sup>1</sup>

However, Fukumoto does not describe vibrating the touch panel as recited in Claim 1. In particular, Fukumoto does not describe determining a pressing operation has been performed by determining a signal from the touch panel has become stable for at least a predetermined period of time, as required in Claim 1. On the other hand, Fukumoto determines a pressing operation has been performed by merely determining whether a coordinate location of an input operation performed on the touch panel corresponds to a button.<sup>2</sup> Further, in the aspect of the “Seventh Embodiment” of Fukumoto discussed on page 12 of the Office Action, Fukumoto merely describes detecting “a force of more than a

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<sup>1</sup> Fukumoto, column 13, line 54 to column 14, line 13; *see also* Fig. 5, especially step S101 ‘NO’.

<sup>2</sup> Fukumoto, column 29, lines 19 to 63.

predetermined level of pressure,” to determine a pressing operation. However, there is no indication in Fukumoto that a time period of the stability of a signal from the touch panel is measured to determine whether the pressing operation is performed, as required by the features of Claim 1.

None of the other cited references overcome the above-noted deficiencies in Fukumoto. Accordingly, it is respectfully submitted Claim 1 (and any claim depending therefrom) is allowable over the cited references.

Although directed to different statutory classes and/or varying in scope, Claims 6-9 and 13-15 recite features which are not met by the cited references for substantially the same reasons as noted above regarding Claim 1. Accordingly, it is respectfully submitted Claims 6-9 and 13-15 (and any claims depending therefrom) are also allowable over the cited references.

Moreover, Claim 9 recites, *inter alia*:

An input apparatus for performing an input operation on a front surface of a panel, comprising:

input detection means for detecting an input operation performed on the front surface of the panel, and for determining whether the input operation is a pressing operation or a touching operation by determining whether a signal from the panel becomes stable for at least a predetermined period of time, the signal from the panel being generated based on the input operation;

time period measurement means for ***measuring a time period starting at when the input operation is detected until a determination*** by the input detection means that ***the signal from the panel has become stable for at least the predetermined period of time***, thus indicating the input operation is the pressing operation;

waveform generation means for ***generating a signal waveform having characteristics based on a length of the time period*** measured by the time period measurement means; and

panel deforming means for deforming the panel corresponding to the signal waveform generated by the waveform generation means.

[Emphasis added].

As noted above, Claim 9 recites measuring a time period from when an input operation is started until a pressing operation is determined, where the pressing operation is determined by the signal from the panel becoming stable for at least a predetermine period of

time. The panel is then deformed according to a signal waveform having characteristics based on a length of the time period from when the input operation is started until the pressing operation is determined. It is respectfully submitted Fukumoto does not describe these features.

The Office Action indicates Fukumoto describes counting the amount of time for a drive signal to be applied.<sup>3</sup> However, there is no indication in Fukumoto that the amount of time for the drive signal to be applied is determined based on a length of the time period from when an input operation is started until a pressing operation is determined. Additionally, Fukumoto does not describe measuring the time period from when an input operation is started until a pressing operation is determined.

None of the other cited references overcome the above-noted deficiencies in Fukumoto. Accordingly, it is respectfully submitted Claim 9 (and any claim depending therefrom) is further allowable over the cited references by virtue of the above-noted features.

Although directed to different statutory classes and/or varying in scope, Claims 13-15 recite features which are not met by the cited references for substantially the same reasons as noted above regarding Claim 9. Accordingly, it is respectfully submitted Claims 13-15 (and any claims depending therefrom) are also further allowable over the cited references by virtue of these features.

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<sup>3</sup> Office Action, pages 6 to 7.

Consequently, in view of the present amendment and in light of the above comments, the outstanding grounds for rejection are believed to have been overcome and the pending claims are believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.


Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413-2220  
(OSMMN 08/07)

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, L.L.P.



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Bradley D. Lytle  
Attorney of Record  
Registration No. 40,073

Marc A. Robinson  
Registration No. 59,276